

**Stowey Quarry Restoration Using SNRHW and
Inert Wastes**

**Response to Comments Received up to 21 March
2011 on Application No. 10/05199/MINW**

Version 1.0 – 21th March 2011

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2055-126-G



Oaktree Environmental Ltd

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- Appendix I – An example of a Wheel Wash System for use at the site
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1 Introduction

- 1.1 The Planning Application to which this document relates is for the “Restoration of Stowey Quarry by landfilling of Stable Non Reactive Hazardous Waste (SNRHW) and inert wastes”. The application reference number for the proposal is 10/05199/MINW and the application was submitted to Bath & North East Somerset Council (BANES) on 9th December 2010.

- 1.2 This document has been drafted in order to provide additional information to BANES Council, its consultees and other interested parties in response to comments which have been officially lodged with the Council on, or before, 21 March 2011.

- 1.3 Each consultation response has been considered in a separate section and may refer to additional documentation which will be submitted along with this document.

2 BANES Contaminated Land Division (14/01/2011)

- 2.1 The response provided by Steve Manning, Scientific Officer of the Contaminated Land Division of BANES Council, refers to the fact that the proposed land use falls within the Environmental Permitting Regime. Therefore, these considerations are passed to the Environment Agency.

3 Hinton Blewett Parish Council (29/01/2011)

- 3.1 Please see Section 10 of this document for further details on the control of run-off from the site which is a concern of Hinton Blewett Parish Council in their response.
- 3.2 The Parish's response also requests that in the event that planning permission is granted, the junction of the quarry access road with Stowey Hill be modified on Highways safety grounds to cope with an anticipated increase in lorry traffic. This application does not seek to increase the number of vehicle movements to/from the site over-and-above the movements currently permitted by the existing permission. Furthermore, Highways Officer, Amanda Hall's comments note that there have been no significant changes to warrant any objection on highways grounds.

4 Environment Agency (02/02/2011)

- 4.1 The Environment Agency's response makes reference to the imposition of a planning condition to be included should planning permission be granted for a surface water drainage scheme to be submitted to, and approved by, the Local Planning Authority. As the surface water drainage scheme will largely be based on intrusive investigations, which will include testing and additional reports to be undertaken as part of the Environmental Permit application, along with in-depth discussions with the Environment Agency, this approach will prevent the possibility of having to vary a scheme/condition which may be agreed prior to an application decision.
- 4.2 The planning informative offered by the Environment Agency reiterates that the proposed landfilling activities will require an Environmental Permit. An application for an Environmental Permit will be commenced and subsequently submitted to the Environment Agency following planning approval for the development, if successful.

5 Avon Wildlife Trust (09/02/2011)

- 5.1 The Trust suggest that conditions be included on any decision notice with regard to reinstatement of the site and further method statements to establish bat use at the site should the proposed development be granted planning permission.
- 5.2 It is intended that a detailed landscaping scheme be submitted to the Planning Authority for approval (subject to planning permission being granted) through consultation with the Council and its consultees and other divisions with a keen interest with regard to the long-term establishment of the site. This scheme will contain detailed considerations of the final restoration methods (i.e. soil covering and depth) and planting details (types, numbers and species) to integrate with the existing vegetation on site to enhance the site agriculturally and ecologically.
- 5.3 A method statement for the protection of roosting bats on site has been included as Appendix III of this document in anticipation of the condition proposed. The phasing characteristics of the proposed development and the envisaged cell construction methods are such that the faces (which are deemed to have most pertinence for bat presence, roosting or hibernation) are affected gradually throughout the course of the landfilling activities. This allows the appropriate surveys to be carried out up-front of the final deposition of material in these areas. Surveying, monitoring and mitigation techniques to be employed at the site are prescribed within the bat method statement in Appendix III.

6 Stowey Sutton Parish Council (10/02/2011)

- 6.1 Concern has been raised by Stowey Sutton Parish Council that Stowey Quarry is not included within the West of England Partnership (WEP) Plan for Waste Treatment Facilities. The landfill at Stowey Quarry will be a disposal facility for Stable Non reactive Hazardous Waste (SNRHW) and inert wastes. This is not a treatment facility. Treatment facilities include sites such as recycling and composting, mechanical biological treatment etc. The WEP does identify suitable sites for waste treatment facilities, under Policy 5, but since the proposed landfill is a disposal operation, this policy does not apply. The WEP plan does not specify any suitable sites for landfill. In any case, WEP states that the allocation of sites within Policy 5 does not preclude positive consideration of waste treatment proposals at alternative locations, so long as they are consistent with the development plan and PPS10.
- 6.2 The issue of the road infrastructure surrounding the site has also been raised in Stowey Sutton Parish Council's response. It is important to note that this application does not seek to increase vehicle movements to/from the site from those which are currently permitted under the site's existing permission as agreed by the Bath & North East Somerset Highways Department. Reference should also be made to the Highways comments made by Amanda Hall in respect of the current proposal which states that there have been no significant changes to warrant any objection on highways grounds.

7 Chris Herbert - Planning Officer (11/02/2011)

- 7.1 Additional details with regard to the proposed bund have been requested in order to show the proposed bund levels and cross sections in comparison to the Original Ground Levels plan. It is important to note that the proposed bund is at a height of 160 m AOD as that agreed for the site's existing permission (App. No. 07/02326/MINW) as specified in Plan BA2 of the agreed Noise Impact Statement approved by Condition 18 of this permission. Completion of this bund under the terms of this permission is now underway. The consented bund has been illustrated for clarity within the current planning application on new Drawing No. 2055/126/11 entitled 'Screening Bund Construction' which shows the bund when compared to the existing ground levels at the site. The agreed Noise Impact Statement has been supplied in Appendix 7 of the Environmental Statement.
- 7.2 The original Indicative Phasing Plan was derived on the basis of producing a coherent leachate drainage scheme for the development. Developing first at the lowest point and working up gradient minimises risks of breaches. The bund to be installed along the western boundary will be of sufficient height to screen all activities in the quarry from Hill View House (the nearest receptor) to the west of the site. The phasing scheme has been adjusted to that depicted on Revision A of Drawing No. 2055/126/07 to take account of the requested phasing concept. Whilst this new scheme still retains the development commencing at the site's lowest point, it ensures the subsequent three phases are carried out on the western boundary. The subsequent Phases 5 – 9 are undertaken in the centre of the site and along the eastern boundary of the site to bring operations away from the western boundary. The final phase of the development (Phase 10) involves the removal of the bund along the western boundary, utilising the material to complete restoration work and infill Phase 10. Phase 10 will not receive any SNRHW.

- 7.3 The Avon RIGS Group advised that the geological exposure “cutaway” proposed was where they would prefer to retain the geological exposure. The drainage scheme for the site shows that peripheral drainage to frequent soakaways is the proposed drainage option for surface water (which is to be further consolidated through submission of a surface water drainage scheme to the Environment Agency by condition). The adjacent strata are clearly highly-permeable and ponding in the area of the exposure is considered highly unlikely as the exposure is outside the lined area.
- 7.4 The proposed pond at the site forms part of the restoration scheme and is not envisaged as constituting an attenuation feature. It is anticipated that the pond will collect land drainage from an area of the restored site, but this is not integral to the drainage of the site post restoration. Post restoration site drainage will naturally percolate to the peripheral areas where a substantial volume of natural fill between the cap and the quarry walls will provide the equivalent of a very large soak-away. Apart from the area where we wish to establish a pond using field drainage, there should be no requirement to install field drainage at the site.
- 7.5 Section 2.3.1 of the Planning, Design & Access Statement refers to the site accepting up to 150,000 of waste per year over a 10-year period. This figure has been provided as an absolute maximum total for waste input. In reality, the average waste input would be derived as follows:
- a) The current void capacity of the site is 300,000 m³ (this equates to 330,000 m³ accounting for 10% additional volume for settlement).
 - b) There is potential to process a further 100,000 m³ of material to remove aggregates and utilise the soils on site (assumed net void gain of 50,000 m³ – i.e. 50:50 aggregates to fines).
 - c) Further excavations of existing material may take place to allow for lining of the site. The extent of this will not be clear until the lining requirements have been established with the Environment Agency, however, the extraction limit of 150 m AOD will not be exceeded. This may provide a further 50,000 m³ net void gain.
 - d) Therefore, the total volume of SNRHW and inert waste fill required (based on the above) would be 430,000 m³.

- e) Using a conversion factor of 1.5 to convert volume to tonnage, the estimated tonnage required for the site would be 645,000 tonnes.
 - f) Therefore, over a 10-year period the average total waste input would be approximately 65,000 tonnes per year.
 - g)
- 7.6 The existing waste overburden stockpiles will be processed simultaneously whilst the landfilling operations are being undertaken. Any processing of existing materials in Phase 1 (as shown on Revision A of Drawing No. 2055/126/07) will be undertaken during the construction phase of the development. The plant/machinery required for the processing operations is described in Section 4.2 of the Planning, Design & Access Statement and these operations will take place as shown on Drawing No. 2055/126/03.
- 7.7 Without undertaking further investigations, additional testing and commissioning additional reports in preparation for the submission of the Environmental Permit and having detailed discussions with the Environment Agency, the lining requirements of the site cannot be quantified and the suitability of the existing material needs to be assessed. Therefore at the planning stage it is difficult to assess whether any additional material would be required to construct the liner. In any circumstance, the maximum vehicle movements of 100 per day will be adhered to during all stages of the development (i.e. constructional and operational)
- 7.8 The final ground levels shown in the proposed restoration and ground levels plan (Drawing No. 2055/126/05) are the post-settlement ground levels. A new supplementary drawing has been produced (Drawing No. 2055/126/12) which shows the pre-settlement levels at the site. An additional 10% volume has been assumed to account for settlement.
- 7.9 Appendix I of this document contains an example of a proposed wheel washing system for the site. Details of the exact wheel washing facilities to be used at the site will be submitted to the Local Planning Authority prior to commencement.
- 7.10 The applicant is willing to accept a cessation of waste importation by 17.00 and a reduction in vehicle movements on a Saturday to 40 as suggested.

- 7.11 The restoration of the completed infill Phases will be carried out in a phased manner ensuring that the restoration of completed phases will be carried out two phases after infilling (i.e. Phase 1 will be restored prior to infilling in Phase 3, Phase 2 will be restored prior to infilling of Phase 4, and so on).
- 7.12 All references to the Somerset Waste Local Plan have been removed from the Environmental Statement and Planning, Design and Access Statement. The new versions of these two documents account for the changes made as result of changes required from the consultations thus far, these are Versions 1.3 and 1.4 respectively.
- 7.13 The Socio-Economic chapter of the Environmental Statement has been updated to include impacts on local businesses and tourism in Version 1.3.
- 7.14 The leachate management system is based on gravity drainage to an extraction point in Phase 1 (see Revision A of Drawing No. 2055/126/07). The objective of the leachate control system will be to maintain a head of leachate which will be specified by the site permit but is likely to be of the order of 1m maximum head. The site will employ a low permeability liner and a basal drainage layer with a herringbone drainage system. It is anticipated that leachate extraction will employ low volume pumping to extract leachate into a bunded tank where it will be stored pending analysis and removal off-site by tanker to a suitably authorised facility for disposal. Because of the nature of the proposed fill material it is not expected that leachate generated will be of a quality that will pose a significant environmental risk. The site design is aimed at keeping volumes as low as possible.
- 7.15 All issues regarding emissions control and monitoring measures are to be agreed with the Environment Agency and limits will be imposed by the conditions of the Environmental Permit. However, as a preliminary indication, a method statement for the disposal of asbestos and monitoring requirements has been included as Appendix II of this document.

- 7.16 Section 11.5.3 regarding the duration of elevated noise levels expected to be experienced at the nearest receptor (i.e. Hill View House) has been amended in Version 1.3 of the Environmental Statement and is confirmed to be 8 weeks.
- 7.17 I can confirm that Section 2.3.3 of the Environmental Statement is our consideration of alternative sites. The site is an existing waste management facility and has good road links. The proposed activity will satisfy the need for restoration. In addition, there are no more sustainable alternatives in the management of SNRHW aside from disposal at a suitable landfill site and therefore a site of this nature is required on a regional/national level.

8 BANES Highways Department (11/02/2011)

- 8.1 The Highway Officer's response recognises that the number of vehicle movement and proposed timescale for the development will not increase above the permitted baseline levels and therefore complies with the same Highways conditions on the current 2007 permission.
- 8.2 It has been requested that an Operational Statement with regard to the hours of operation, routeing arrangements for heavy goods vehicles (HGVs), provision for wheel wash facilities, details of the method of monitoring for HGV movements and a road condition survey be submitted to the Council for approval by condition. Whilst the applicant is willing to provide the majority of the details requested, a road condition survey would seem unjustified due to the fact that the amount of vehicle movements and nature of vehicles within the new development proposals will not change from what is currently permitted.
- 8.3 The applicant notes the presence of Pubic Footpath CL20/18 which is located alongside the south-western corner of the site and will ensure that the development proposals are carried out to ensure this right of way will not be altered or affected during or after the development.

9 Pro Planning – Kathy Curling (14/02/2011)

- 9.1 In response to the first technical query with regard to Question 23 on Hazardous Substances on the planning application forms, the application was submitted via the Planning Portal which uses the 1-APP planning application form. This section of the application forms requests information on any substances identified in Schedule 1 of The Planning (Hazardous Substances) Regulations 1992 as requiring a ‘hazardous substances consent’ for the use and/or storage of these substances at the site. Whilst there is no doubt that the application proposals involve the disposal of stable non-reactive hazardous substances, such as asbestos, these substances are not specified in this Schedule.
- 9.2 The third technical query of Kathy Curling’s comments involves the consideration of alternative sites. It is not the Council who set the requirement for consideration of alternatives, this is a requirement of the EIA process, as required under Part II of Schedule 4 of the Environmental Impact Assessment (England and Wales) Regulations 1999 (As Amended). The EIA regulations require that alternatives be considered, taking into account environment effects. As such, alternatives were considered within the EIA. Reference should be made to Section 2.3 of the Environmental Statement which considers the need for development and alternatives. To summarise, minimal adverse environmental impacts have been predicated by siting the landfill at Stowey Quarry. This, combined with the fact that the site is already an operational waste management facility and the need to restore the quarry is considered to make this location suitable. Furthermore, there are no more sustainable alternatives in the management of SNRHW aside from disposal at a suitable landfill site and therefore a site of this nature is required on a regional/national level.

10 Bristol Water – M J Berry (01/03/2011 & 09/03/2011)

- 10.1 The Environmental Impact Assessment (EIA) addressed the issues raised by the Environment Agency at the time of scoping the proposed use of the site for the deposit of SNRHW. This is material which is either inherently non-reactive when deposited in a landfill, but classified as hazardous (asbestos for example), or wastes which have been treated to stabilise the hazardous components and subject to testing to provide quality assurance that the material will not release any hazardous components into leachate when deposited.
- 10.2 It is anticipated that a substantial engineered lining system will be put in place, however, the exact details are a matter for the Environment Agency to set within the conditions of an Environmental Permit. This will be required prior to the deposit of waste on site should planning consent be granted for the proposed use. Environmental Permits encompass the requirements of the groundwater regulations. As such, at the permitting stage a hydrogeological risk assessment will be produced which will consider, in detail, all hydrogeological features in the locality which could be affected by the development including the Chew Reservoir.
- 10.3 There is no intention of treating any waste within the site other than the quarry wastes already *in-situ* which originated from within the site. This will, in part, be retained for cover and restoration material and, in part, recycled as hardcore and soil or soil substitute.
- 10.4 Whilst there has been no specific detailed risk assessment carried out as yet, the site (as proposed) will be accepting waste which by definition will not produce any polluting leachate and which will be contained at the site within the engineered lining and drainage systems designed to prevent any leachate produced at the site from percolating into the ground.

- 10.5 I trust this demonstrates that for planning purposes and in terms of the EIA the risk of groundwater pollution and as a consequence possible affects on Chew Reservoir have been considered. The risk to groundwater and the Chew Reservoir is covered in detail as part of the Environmental Permitting process at which stage Bristol Water will have chance to comment on detailed consideration of the risks posed by the site and the measures in place to mitigate any risks identified.
- 10.6 It should be noted that the Environment Agency will not grant a permit for the landfill unless they are satisfied it will pose no risk to ground or surface waters.
- 10.7 As a matter of courtesy, a copy of the full hydrogeological risk assessment will be sent to Bristol Water at the time of application for the Environmental Permit.

11 Environment Team – Landscape (04/03/2011)

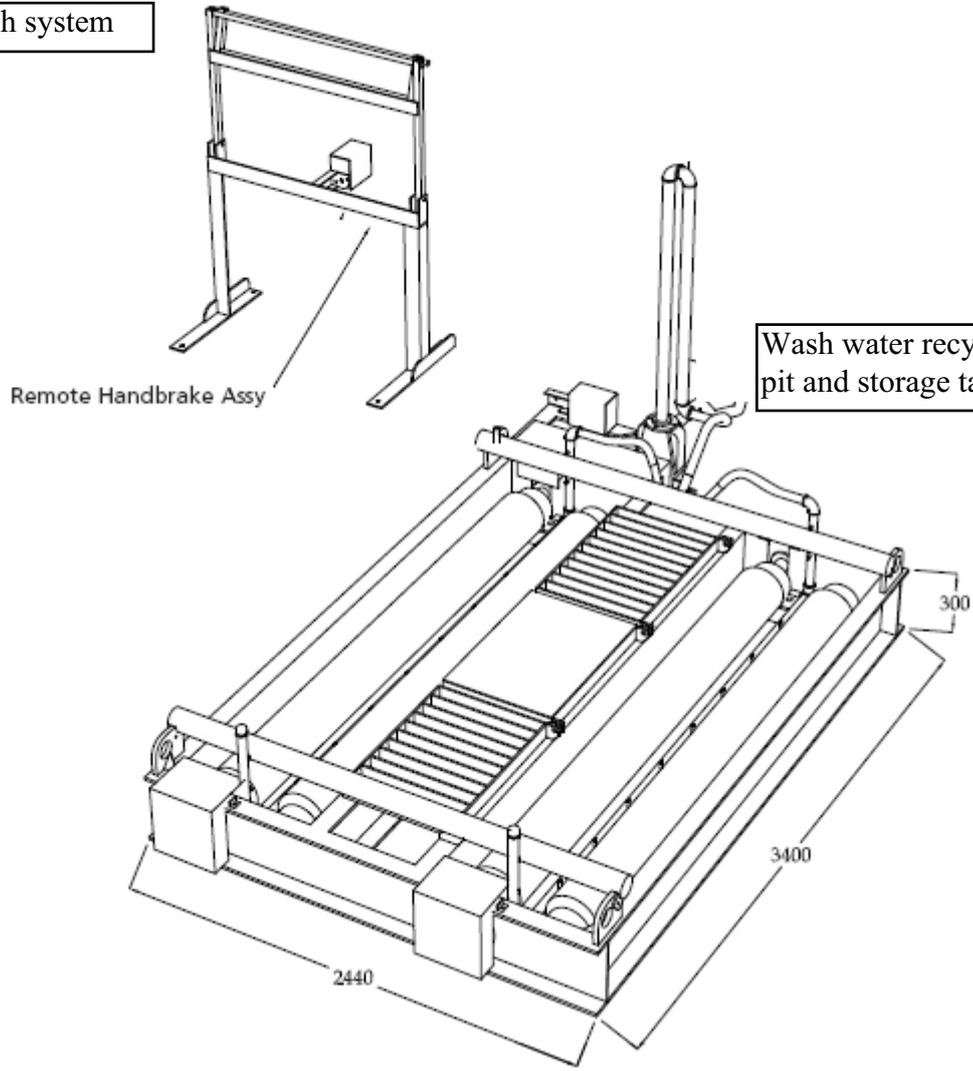
- 11.1 Whilst the response raises concerns over the presence of existing vegetation, it is difficult to see how a drawing showing the exact extent of existing vegetation in true scale would be possible taking consideration for the size and number of trees and foliage amounts through different stages of abscission. The existing vegetation as shown on the Proposed Ground Levels & Restoration Plan (Drawing No. 2055/126/05) is diagrammatic for indicative purposes only, subject to the submission of a detailed planting scheme which is proposed for the site, to be compiled in accordance with discussions with the Council's statutory consultees with an interest in the long-term establishment of the site following completion of the landfilling activities.
- 11.2 Whilst the Ecological Report in Appendix 6 of the Environmental Statement refers to loss of hedges to the southern boundary as a result of the proposed development, this is not the case and has been included in error. All existing vegetation at the site will be protected before and during the development to ensure that no loss or damage is incurred and enhanced following completion in accordance with an agreed detailed scheme to be submitted to and agreed with the Local Planning Authority.
- 11.3 With regard to concerns over the visual impact of the 6 m high bund to the western boundary, this is an issue which has been agreed with the Local Planning Authority previously as part of the 2007 permissions. The Noise Impact Statement referred to in Condition 18 of Planning Permission No. 07/02326/MINW and included in Appendix 7 of the Environmental Statement will be followed through with regard to the bund to a height of 160 m AOD as specified in Plan BA 2. This bund was partly constructed at the time of submission of this application and is currently being completed under the terms of the existing permission. Therefore, the proposed bund will be no different to the baseline agreed specification. An additional plan has been produced showing the ground levels and cross sections of the bund for clarity (see Drawing No. 2055/126/11).

- 11.4 The after-use of the site will be a return to open agricultural land further to details to be agreed with the Local Planning Authority via the submission of a detailed scheme. The agreed scheme will dictate the type of planting, seeding and depths and type of soil covering which the land would benefit most from both agriculturally and ecologically. The bund to be constructed is temporary and therefore no tree/shrub planting has been proposed, the bund will be seeded with a suitable grass seed mix

APPENDIX I:

An example of a Wheel Wash System for use at the site

Drawing of wheel wash system



APPENDIX II:

Asbestos disposal method statement and monitoring requirements

**Stable Non-Reactive Hazardous Waste Landfill
at Stowey Quarry**

**Asbestos Disposal Method Statement and
Monitoring Requirements**

Version 1.0 – 21st March 2011

Appendix II of Document Reference: 2055-126-G



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1 Introduction

- 1.1 This document outlines the proposed Stable Non Reactive Hazardous Waste (SNRHW) disposal methodology for the proposed landfill at Stowey Quarry and outlines the likely air monitoring requirements of the Environment Agency (EA) under the conditions of the Environment Permit for the site. Any monitoring protocol will need to be agreed with the EA at the permit application stage

2 Asbestos Disposal Method Statement

- 2.1 Any asbestos containing waste will be handled and accepted in accordance with the Control of Asbestos Regulations 2006 and Hazardous Waste Regulations 2005, as appropriate. Adequate information, instruction and training will be given to employees who may be exposed to asbestos or who supervise such employees.
- 2.2 All loads of waste which enter the site will be weighed on the weighbridge. All vehicle drivers will then be required to report to the person in charge of waste reception upon arrival at the site. The load will be recorded and its contents inspected.
- 2.3 Cement-bonded asbestos accepted on site will be regularly sprinkled with water. Any other asbestos containing wastes accepted on site will be appropriately packaged in accordance with the approved codes of practice and guidance documents. Such waste will be double-bagged, with the bags contained within sealed containers. Such containers will not be opened until within the landfill cell.
- 2.4 Once tipped, the waste will be immediately covered to a depth of 250mm using inert materials, with coverage of up to 1 m applied on all flanks and surfaces at the end of each working day. No works will be undertaken on the landfill / landfill cell that could lead to the release of fibres, or dust.
- 2.5 The site will be staffed, whenever it is open, by a minimum of 3 fully-trained operatives during all operational hours to effectively supervise the reception, handling and removal of waste.

3 Asbestos Monitoring

3.1 A dust monitoring protocol will be agreed with the Environment Agency at the permitting stage. It is expected that the type of asbestos disposed of at Stowey Quarry would mainly include cement bonded asbestos. As such, the risk of any release of asbestos fibres would be considered to be minimal. Nevertheless, it is likely that the site operator will be required to undertake ambient monitoring of asbestos. The following air quality criteria apply for fibres from waste facilities

Table 1 Air Quality Criteria for Asbestos

Pollutant	Concentration
Asbestos (non-chrysotile)	0.002 fibres/ml measured over a 4 hour period

3.2 The method used for asbestos monitoring would be likely to include the collection of air samples onto cellulose acetate at a sampling rate of 8 litres.min⁻¹, followed by fibre counting by phase contrast microscopy in accordance with HSE guidance notes EH10 and MDHS 39/2. Results would be compared with the above criteria. Ambient samples would be collected at strategic locations surrounding the active landfill cell, to be agreed with the EA. The monitoring would be continued during the lifetime of each landfill cell. The length of time between each set of samples being collected would be agreed with the EA, but it is anticipated that this would be likely to be on a quarterly basis. In order to ensure representative results, the monitoring locations will be changed each time so as to ensure downwind and upwind samples are obtained.

APPENDIX III:

Bat Method Statement

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*Method Statement for Works Relating to Bats
at*

Landfill at Stowey Quarry

BY

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GEN/10/217

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1. Brief of works

The operational phase of the development will include excavation and preparation of landfill cells, the receipt and tipping of SNRHW itself and restoration of the site. It is currently anticipated that the available void for landfilling will be approximately 300,000m³ and based upon the maximum input of materials, the landfill operations would currently be anticipated to last for a period of approximately 10 years, after which time the site will be fully restored for agricultural use.

2. Method Statement

An extended Phase 1 Habitat survey of the site was undertaken in 2010 by Wessex Ecological Consultancy. This revealed that the rock faces on site do not present any significant value for any species of bat.

There are no other features on site that could support roosting bats and no habitats likely to be of significant value as bat foraging habitat were found. The nearest bat records are 1.5km from the site.

As a precaution the following procedures will be followed.

General working guidelines

1. Prior to the commencement of work which will impact upon the rock face the site should be re-checked to determine the absence of bats. This will comprise a bat activity survey following the recommended guidelines in BCT (2007). It is expected this will involve dusk and or dawn activity and transect surveys. Bat species, flight lines, foraging areas and roost sites will be recorded.
2. Should there be no indication of use of the rock face by bats, work may then proceed. A repeat survey should be undertaken at least annually until such time as it is considered that the rock face no longer offers any potential for use by bats. As there is considered to be more potential for hibernation in the rock face (caves or cavities are suspected as occurring behind it), surveys should ideally be undertaken in the bat swarming season September to November.
3. The commencement of work affecting the rock face will be avoided during periods of cold (daytime temperatures less than 4 degrees centigrade) should be avoided due to the potential for disturbing hibernating bats. This accords with Natural England EPS licensing guidelines.
4. Points 1, 2 and 3 above may be ignored if an intrusive inspection (using a fibre scope or similar) of the areas of the rock face affected reveal there are no suitable crevices into which bats could take entry for roosting or hibernating.
5. Be aware that bats may be present around the site, advise contractors accordingly.
6. Be observant during land filling operations for bats which may use the rock face if the new areas of the face are exposed or created. Bats are opportunistic and may make use of gaps opened up during work.
7. If bats are found or suspected as using the site, stop all work and contact the ecological consultant for this project Andrew Gardner Tel: 0781 2081320 prior to work re-commencing.

3. Mitigation and Compensation

The mitigation strategy is designed to meet the test of there being no adverse effect on the favourable conservation status of any bat species affected by the proposed work.

Natural England require that mitigation addresses the impacts picked up by the site assessment, as follows:-

- **Quantitative characteristics:** There should be no net loss of roost sites, and in fact where significant impacts are predicted there will be an expectation that compensation will provide an enhanced resource compared with that to be lost. The reasoning behind this concept is that the acceptability of newly created roosts by bats is not predictable
- **Qualitative characteristics:** the plans should aim to replace like with like. As an extreme example, it would be unacceptable to replace maternity roosts with hibernation sites.
- **Functional characteristics:** compensation should aim to ensure that the affected bat population can function as before. This may require attention to the environment around the roost.

No bat roosting has currently been identified at the site and it has limited potential for foraging. A mitigation strategy will be devised should there be an identified impact on bats in the future in line with the three core principles above. The client and his agents are aware of the protection and sensitivity of bat species. Notes on the protection afforded to bats is included at Section 5.

4. Contact Details

Project Lead: **Andrew Gardner**

Direct Dial: **015395 61894**

Mobile: **07812081320**

Email: info@envtech.co.uk

Andrew Gardner hold bat disturbance and survey licences from all three UK Mainland statutory Conservation Agencies for all species of bat. Andrew Gardner is a full professional member of the Institute of Ecology and Environmental Management and the Royal Institution of Chartered Surveyors (Rural Practice Division). He is also a Chartered Environmentalist.

5. Supplementary information

5.1 Rabies-related European Lyssavirus (EBLV)

Cases of rabies-related European Lyssavirus are still very rare within Britain. The disease can be contracted through a bat bite, the death of a bat worker in 2002 illustrates this (Mitchell-Jones et al., 2004). The virus is assumed to be present within the UK and as a result precautions should be taken when working in areas where bats may be present.

Workers should avoid handling bats. The advice from the Department of Health is that there is no risk to the general public provided they do not touch or pick up bats. If a worker is bitten they should seek immediate medical advice.

5.2 Legal information

All species of bats are listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Therefore they are subject to the provisions of Section 9, which make it an offence to:

- Intentionally kill, injure or take a bat [Section 9(1)]
- Possess or control any live or dead specimen or anything derived from a bat [S9(2)]
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by a bat [S 9(4)(a)]
- Intentionally or recklessly disturb a bat while it is occupying a structure or place which it uses for that purpose [S 9(4)(b)]

In addition to other amendments the 1981 Act has been amended by the Countryside and Rights of Way [CRoW] Act 2000, which added 'or recklessly' to Sections 9(4) (a) and (b).

All bat species are also protected under the Conservation (Natural Habitats &c.) Regulations 1994 (the Habitats Regulations), Schedule 2, Regulation 39 and Amendments to the Habitat regulations 2007.

Regulation 39 makes it an offence to:

- Deliberately capture or kill a bat [Regulation 39(1)(a)]
- Deliberately disturb a bat [R. 39(1)(b)]
- Damage or destroy a breeding site or resting place of a bat [R. 39(1)(d)]
- Keep, transport, sell or exchange, or offer for sale or exchange a live or dead bat or any part of a bat [R. 39(2)]

5.2.1 Police and Court Powers

A police officer who suspects with reasonable cause that a person is committing - or has Committed - an offence can stop and search them, search or examine any relevant thing in their possession, and seize it. They can also enter land other than a dwelling house without a warrant, or enter and search a dwelling house (with or without other persons) with a warrant. In England and Wales the person/s committing bat offences can be arrested.

The potential fine for each offence is £5,000. If more than one bat is involved, the fine is £5,000 per bat. In England and Wales an offender can also be imprisoned for six months. The forfeiture of any bat or other thing by the court is mandatory on conviction, and items used to commit the offence - vehicles, for example – may be forfeited.

5.3 Bat Information

5.3.1 Bat Biology

Bats emerge around sunset from their roost sites and generally follow the same flight path to their favored foraging areas. Bats feed primarily on insects; Pipistrelle bats will mainly catch and eat small soft-bodied insects such as midges and moths, whereas the larger Noctule bats can eat hard-bodied beetles. Bats will congregate where insects are abundant, for example, on the edge of woodlands, woodland clearings, along hedgerows and around water bodies such as ponds, lakes, rivers and canals. In late summer and autumn, bats build up their fat supplies, this allows them to hibernate from October to March. Bats hibernate in trees, buildings, caves or similar places away from disturbance. By early spring their fat reserves are nearly all used up and they wake. Mating tends to take place in autumn but fertilization does not occur until the following spring. One young is born in late June or early July, after three weeks it is fully grown and it is independent by late summer (Anon, 2007).

Recent surveys have indicated that almost all the British species of bat are in decline, with a large population fall for even the most abundant species, the Common Pipistrelle (UKBAP, 2007, SBAP, 2000). Intensive agricultural practices, including removal of unimproved pastureland, hedgerows and woodlands has caused a decline in the numbers and variety of insects available for the bats to feed on. Roost sites are lost when old decaying trees with suitable holes are felled during maintenance operations. Roost sites in buildings are lost when access points are blocked, roofing work and timber treatment is carried out or cavity walls are filled with insulation.